

# 2010 LUMIX® ZS7 ZS5 DIGITAL CAMERA



ZS7



ZS5

## ULTRA COMPACT 25MM WIDE ANGLE LENS AND 16X INTELLIGENT ZOOM

Easily bring your images closer without losing picture quality in an ultra compact camera



ZS7



ZS7

## HD MOVIE RECORDING IN AVCHD LITE FORMAT (ZS7)

Record HD quality movies.



ZS7 / ZS5

## POWER O.I.S.

Enhanced technology to further prevent blurring caused by vibration.

- LEICA DC VARIO-ELMARIT Lens
- 12.1 Megapixel
- 12x Optical Zoom
- Travel Mode with GPS (ZS7)
- Manual Exposure
- Sonic Speed AF

**Panasonic** LUMIX®

# 2010 LUMIX® ZS7/ZS5 Digital Camera Specifications

		DMC-TZ10/ZS7		DMC-TZ8/ZS5	
METRICS	Dimensions (W x H x D)	103.3 x 59.6 x 32.6 mm (4.07 x 2.35 x 1.28 in)		103.3 x 59.6 x 32.6 mm (4.07 x 2.35 x 1.28 in)	
	Weight	Approx. 218g with Battery and SD Memory Card (0.48 lb); Approx. 196g without Battery and SD Memory Card (0.43 lb)		Approx. 214g with Battery and SD Memory Card (0.47 lb); Approx. 191g without Battery and SD Memory Card (0.42 lb)	
	Pixels	12.1 Megapixels		12.1 Megapixels	
	CCD	Sensor Size/Total Pixels/Filter 1/2.33-type / 14.5 Total Megapixels / Primary Color Filter		1/2.33-type / 14.5 Total Megapixels / Primary Color Filter	
	Lens	Aperture F3.3-4.9/ Multistage Iris Diaphragm (F3.3-6.3 (W)/F4.9-6.3 (T))		F3.3-4.9/ Multistage Iris Diaphragm (F3.3-6.3 (W)/F4.9-6.3 (T))	
		Optical Zoom 12x		12x	
		Focal Length f=4.1-49.2mm (25-300mm in 35mm equiv.)		f=4.1-49.2mm (25-300mm in 35mm equiv.)	
		Extra Optical Zoom (EZ) 14.7x (4.3 / 8M), 18.8x (4.3 / 5M), 23.4x (under 3M)		14.7x (4.3 / 8M), 18.8x (4.3 / 5M), 23.4x (under 3M)	
		Intelligent Zoom 10x		10x	
		LEICA DC VARIO-ELMAR; 10 elements in 8 groups; (2 Aspherical Lenses / 3 Aspherical Surfaces / 2 ED Lenses)		LEICA DC VARIO-ELMAR; 10 elements in 8 groups; (2 Aspherical Lenses / 3 Aspherical Surfaces / 2 ED Lenses)	
OPTICS	Lens	LEICA DC VARIO-ELMAR; 10 elements in 8 groups; (2 Aspherical Lenses / 3 Aspherical Surfaces / 2 ED Lenses)		LEICA DC VARIO-ELMAR; 10 elements in 8 groups; (2 Aspherical Lenses / 3 Aspherical Surfaces / 2 ED Lenses)	
	2-Speed Zoom	Yes		Yes	
	Optical Image Stabilizer	Power O.I.S. (Off / Auto / Mode1 / Mode2)		Power O.I.S. (Off / Auto / Mode1 / Mode2)	
	Conversion Lens Compatibility	-		-	
	Digital Zoom	4x (Max. 48.0 x combined with Optical Zoom without Extra Optical Zoom); (Max. 93.8 x combined with Extra Optical Zoom)		4x (Max. 48.0 x combined with Optical Zoom without Extra Optical Zoom); (Max. 93.8 x combined with Extra Optical Zoom)	
	Focus	Normal: Wide 50 cm - infinity / Tele 200 cm - infinity; Macro / Intelligent AUTO / Clipboard: Wide 3 cm - infinity / Tele 100cm - infinity		Normal: Wide 50 cm - infinity / Tele 200 cm - infinity; Macro / Intelligent AUTO / Clipboard: Wide 3 cm - infinity / Tele 100cm - infinity	
		Focus Range Display Yes		Yes	
		AF Assist Lamp Yes		Yes	
		Focus Normal / Macro, Zoom Macro, Quick AF On/Off (On in Intelligent Auto), Continuous AF On/Off, AF Tracking*		Normal / Macro, Zoom Macro, Quick AF On/Off (On in Intelligent Auto), Continuous AF On/Off, AF Tracking	
		AF Metering Face / AF Tracking / 11pt / 1pt HS / 1pt / Spot		Face / AF Tracking / 11pt / 1pt HS / 1pt / Spot	
SHUTTER	Shutter Speed	Still: 60 - 1/2000 sec; Slurry Sky Mode: 15, 30, 60sec.		Still: 60 - 1/2000 sec; Slurry Sky Mode: 15, 30, 60sec.	
	Shutter Interval	approx. 1.0 sec		approx. 1.1 sec	
	Finder	Viewfinder		Viewfinder	
	IA	Face Recognition Photo Photo & Movie		Face Recognition Photo Photo & Movie	
		Optical Image Stabilizer Photo Photo & Movie		Optical Image Stabilizer Photo Photo & Movie	
		Intelligent ISO Control Photo Photo & Movie		Intelligent ISO Control Photo Photo & Movie	
		Face Detection Photo (Portrait, Scenery, Night Portrait, Night Scenery, Sunset, Macro) & Movie (Portrait, Scenery, Low Light, Macro)		Face Detection Photo (Portrait, Scenery, Night Portrait, Night Scenery, Sunset, Macro)	
		Intelligent Scene Selector Photo & Movie		Intelligent Scene Selector Photo & Movie	
		AF Tracking Photo		AF Tracking Photo	
		Digital Red-Eye Correction (Red-Eye Removal) Photo		Digital Red-Eye Correction (Red-Eye Removal) Photo	
FILE	IA Direct Button	Photo & Movie		Photo & Movie	
	Intelligent Resolution Technology	Still Image: JPEG(DCF/Exif2.21); Image with Audio: JPEG (DCF / Exif2.21) + QuickTime; Motion picture: AVCHD Lite / QuickTime Motion JPEG		Still Image: JPEG(DCF/Exif2.21); Image with Audio: JPEG (DCF / Exif2.21) + QuickTime; Motion picture: QuickTime Motion JPEG	
	File Format	Still Image: JPEG(DCF/Exif2.21); Image with Audio: JPEG (DCF / Exif2.21) + QuickTime; Motion picture: AVCHD Lite / QuickTime Motion JPEG		Still Image: JPEG(DCF/Exif2.21); Image with Audio: JPEG (DCF / Exif2.21) + QuickTime; Motion picture: QuickTime Motion JPEG	
	AVCHD Lite REC	NTSC		NTSC	
	Interface	Mode Switch [Recording] / [Playback]		Mode Switch [Recording] / [Playback]	
	One-Touch Movie Button	Yes		Yes	
	Recording Modes	Intelligent Auto, P, A, S, M, Custom, My SCN 1, My SCN 2, SCN, Clipboard Portrait, Soft Skin, Transform, Self-Portrait, Scenery, Panorama Assist, Sports, Night Portrait, Night Scenery, Food, Party, Candle Light, Baby1, Baby2, Pet, Sunset, High sensitivity, Hi-Speed Burst, Flash Burst, Slurry Sky, Fireworks, Beach, Snow, Aerial		Intelligent Auto, P, A, S, M, Custom, My SCN, SCN, Motion Picture, Clipboard Portrait, Soft Skin, Transform, Self-Portrait, Scenery, Panorama Assist, Sports, Night Portrait, Night Scenery, Food, Party, Candle Light, Baby1, Baby2, Pet, Sunset, High sensitivity, Hi-Speed Burst, Flash Burst, Slurry Sky, Fireworks, Beach, Snow, Aerial	
	Movie Scene Mode	Portrait, Soft Skin, Transform, Self-Portrait, Scenery, Low Light, Food, Party, Candle Light, Sunset, Beach, Snow, Aerial, Pinhole, Film Grain, Underwater, High Sensitivity, High Dynamic(Standard, Art, B&W) (Activated by selecting Still Picture Scene Mod)		Portrait, Soft Skin, Transform, Self-Portrait, Scenery, Low Light, Food, Party, Candle Light, Sunset, Beach, Snow, Aerial, Pinhole, Film Grain, Underwater, High Sensitivity, High Dynamic(Standard, Art, B&W) (Activated by selecting Still Picture Scene Mod)	
	Continuous Shooting Mode	Full-Resolution Image, 2.3 frames/sec; Max. 5 images (Standard mode); Max 3 images (Fine Mode); High-speed Burst Mode: approx. 6.0 frames/sec (image priority) approx. 10 frames/sec (speed priority); (recorded in 3M for 4:3, 2.5M for 3:2, 2M for 16:9)		Full-Resolution Image, 2.3 frames/sec; Max. 5 images (Standard mode); Max 3 images (Fine Mode); High-speed Burst Mode: approx. 6.0 frames/sec (image priority) approx. 10 frames/sec (speed priority); (recorded in 3M for 4:3, 2.5M for 3:2, 2M for 16:9)	
	Unlimited Consecutive Shooting	-		-	
Flash Burst Continuous Shooting Mode	Max. 5 images (Standard mode)		Max. 5 images (Standard mode)		
Motion Picture Recording	4:3 VGA: 640 x 480 pixels, 30fps (Motion JPEG); OVGA: 320 x 240 pixels, 30 fps (Motion JPEG)		4:3 VGA: 640 x 480 pixels, 30fps (Motion JPEG); OVGA: 320 x 240 pixels, 30 fps (Motion JPEG)		
	16:9 WVGA: 848 x 480 pixels, 30 fps (Motion JPEG)		16:9 WVGA: 848 x 480 pixels, 30 fps (Motion JPEG)		
	HD Movie (AVCHD Lite, GSH, SH: 17Mbps / GH, HT:13Mbps / GL, L:9Mbps) / 30fps (Motion JPEG)* Approx. 100 min**		HD Movie (AVCHD Lite, GSH, SH: 17Mbps / GH, HT:13Mbps / GL, L:9Mbps) / 30fps (Motion JPEG)* Approx. 100 min**		
Continuous Recordable Time (Motion Pictures)	AVCHD Lite with Picture Quality Set to [SH] MOTION JPEG with Picture Quality Set to [HD] AVCHD Lite with Picture Quality Set to [SH] MOTION JPEG with Picture Quality Set to [HD]		AVCHD Lite with Picture Quality Set to [SH] MOTION JPEG with Picture Quality Set to [HD] AVCHD Lite with Picture Quality Set to [SH] MOTION JPEG with Picture Quality Set to [HD]		
Actual Recordable Time (Motion Pictures)	Approx. 50 min**		Approx. 50 min**		
EXPOSURE	Exposure Parameters	Program AE, Aperture Priority AE, Shutter Priority AE, Manual 1/3 EV Step, +/- 2 EV		Program AE, Aperture Priority AE, Shutter Priority AE, Manual 1/3 EV Step, +/- 2 EV	
	Exposure Compensation	Yes (only in Intelligent AUTO mode)		Yes (only in Intelligent AUTO mode)	
	Auto (AE) Bracketting	+/- 1/3 EV - 1EV step, 3 frames		+/- 1/3 EV - 1EV step, 3 frames	
	Multi-Aspect	Yes		Yes	
	Light Metering	Intelligent Multiple / Center Weighted / Spot		Intelligent Multiple / Center Weighted / Spot	
	ISO Sensitivity	Auto / 80 / 100 / 200 / 400 / 800 / 1600; High Sensitivity ISO 1600-6400		Auto / 80 / 100 / 200 / 400 / 800 / 1600; High Sensitivity ISO 1600-6400	
	Max. Auto ISO Setting	4.3 / 3.2 / 16.9		4.3 / 3.2 / 16.9	
	Aspect Ratio	4:3 / 3:2 / 16:9		4:3 / 3:2 / 16:9	
	Still Picture Recording	4000x3000(12M) / 3264x2448(8M) / 2560x1920(5M) / 2048x1536(3M) / 640x480(0.3M)		4000x3000(12M) / 3264x2448(8M) / 2560x1920(5M) / 2048x1536(3M) / 640x480(0.3M)	
		4176x2784 (11.5M) / 3392x2264 (7.5M) / 2656x1768 (4.5M) / 2048x1360 (2.5M) / 640x424 (0.3M)		4176x2784 (11.5M) / 3392x2264 (7.5M) / 2656x1768 (4.5M) / 2048x1360 (2.5M) / 640x424 (0.3M)	
	4320x2432 (10.5M) / 3552x2000 (7M) / 2784x1568 (4.5M) / 1920x1080 (2M) / 640x360 (0.2M)		4320x2432 (10.5M) / 3552x2000 (7M) / 2784x1568 (4.5M) / 1920x1080 (2M) / 640x360 (0.2M)		
Image Quality	Fine / Standard		Fine / Standard		
White Balance	Auto / Daylight / Cloudy / Shade / Hologen / White Set (Selectable at Portrait, Soft Skin, Transform, Self-Portrait, Sports, Panorama Assist, Baby, Pet, High Sensitivity, Highspeed Burst, Pinhole, Photo Frame, High Dynamic, Underwater)		Auto / Daylight / Cloudy / Shade / Hologen / White Set (Selectable at Portrait, Soft Skin, Transform, Self-Portrait, Sports, Panorama Assist, Baby, Pet, High Sensitivity, Highspeed Burst, Pinhole, Photo Frame, High Dynamic, Underwater)		
Quick Menu	Yes		Yes		
Color Mode/Color Effect	Standard, Black & White, Sepia, Cool, Warm, Happy (only in IA Mode)		Standard, Black & White, Sepia, Cool, Warm, Happy (only in IA Mode)		
Picture Adjustment	Contrast +2steps, Sharpness +2steps, Saturation +2steps, Noise Reduction		Contrast +2steps, Sharpness +2steps, Saturation +2steps, Noise Reduction		
OTHERS	Still Image with Audio Recording	5 sec		5 sec	
	GPS	Yes		Yes	
	Flip Animation	-		-	
	Real-Time Histogram	Yes		Yes	
	Composition Guideline	Yes (2 pattern)		Yes (2 pattern)	
	Auto Review	Tsec, 2sec, Hold		Tsec, 2sec, Hold	
	Easy Zoom/Zoom Resume	No / Yes		Yes / Yes	
	Optical Zoom in Motion Picture	Yes		Yes	
	Macro Zoom	Yes		Yes	
	Orientation Detector	Yes		Yes	
Scene Mode Help Screen	Yes		Yes		
Self Timer	2sec / 10sec		2sec / 10sec		
Focus Lock Select	Yes (in Face Recognition only)		Yes (in Face Recognition only)		
Playback Mode	Normal Playback, Slideshow, Mode Playback, GPS Playback, Travel Playback, Category Playback, Favorites Playback*		Normal Playback, Slideshow, Mode Playback, Travel Playback, Category Playback, Favorites Playback*		
Thumbnails/Zoomed Playback	12.30-thumbnails / Max 16x		12.30-thumbnails / Max 16x		
Calendar Display/Dual-Image Playback	Yes / No		Yes / No		
Set Favorites/Rotate Image	Yes / No		Yes / No		
Playback Still Images with Audio	Yes		Yes		
Playback Motion Picture	Yes (AVCHD Lite/ Motion JPEG)		Yes (Motion JPEG)		
Slideshow Mode	All / Still Images Only / Motion Picture Only / GPS Area / Travel / Category / Favorites / BGM Effect (Natural / Slow / Swing / Urban / OFF)		All / Still Images Only / Motion Picture Only / Travel / Category / Favorites / BGM Effect (Natural / Slow / Swing / Urban / OFF)		
Show Histogram	Yes		Yes		
Show Highlights	-		-		
Delete	Single / Multi / All / All except Favorites		Single / Multi / All / All except Favorites		
Edit	DPOF Print Setting/Set Protection Yes / Yes		DPOF Print Setting/Set Protection Yes / Yes		
	Resize/Trim/Aspect Conv./Leveling Yes / Yes / Yes		Resize/Trim/Aspect Conv./Leveling Yes / Yes / Yes		
	Copy/File Edit/Text Stamp Yes / Yes / Yes		Copy/File Edit/Text Stamp Yes / Yes / Yes		
	Cut Animation Yes		Cut Animation Yes		
	Video Divide Yes		Video Divide Yes		
	PicBridge Support Single / Multi / All / Favorites / DPOF		PicBridge Support Single / Multi / All / Favorites / DPOF		
SETUP	OSD Language	English/Spanish		English/Spanish	
	Movie REC Guide	Yes		Yes	
	Wind-Out in Motion Picture	Yes		Yes	
	Travel Date/World Time	Yes / Yes		Yes / Yes	
	Monitor	LCD Monitor 7.5cm (3.0") TFT Screen LCD Display (460K dots), AR Coat; Field of View : approx. 100% Wide Viewing Angle; AUTO Power LCD mode, Power LCD mode		7.6cm (2.7") TFT Screen LCD Display (230K dots); Field of View : approx. 100% Wide Viewing Angle; AUTO Power LCD mode, Power LCD mode	
	Tough	Touch Panel Waterproof Dustproof Freezeproof Shockproof		Touch Panel Waterproof Dustproof Freezeproof Shockproof	
	Flash	Auto, Auto/Red-eye Reduction, Forced On, Slow Sync./Red-eye Reduction, Forced Off; 0.6 - 5.3m (Wide/ISO Auto), 1.0 - 3.6m (Tele/ISO Auto)		Auto, Auto/Red-eye Reduction, Forced On, Slow Sync./Red-eye Reduction, Forced Off; 0.6 - 5.3m (Wide/ISO Auto), 1.0 - 3.6m (Tele/ISO Auto)	
	Media	External Flash Recording Media Built-in Memory, SD Memory Card, SDHC Memory Card, SDXC Memory Card		External Flash Recording Media Built-in Memory, SD Memory Card, SDHC Memory Card, SDXC Memory Card	
	Audio	Microphone/Speaker Interface Stereo/Dolby® Digital Stereo Creator / Yes		Microphone/Speaker Interface Stereo/Dolby® Digital Stereo Creator / Yes	
	Network	AV Output (NTSC), mini HDMI, USB2.0 High speed		AV Output (NTSC), mini HDMI, USB2.0 High speed	
Power	Video: Auto / 1080 / 720p / 480p; Audio: Dolby® Digital Stereo Creator* HDMI Output Yes		Video: Auto / 1080 / 720p / 480p; Audio: Dolby® Digital Stereo Creator* HDMI Output Yes		
Standard Package	PHOTOunSTUDIO 5.1 HD Edition (5.0 Edition for China); QuickTime; Adobe Reader* Battery Charger, Battery Pack, Battery Case, AV Cable, USB Cable, Hand Strap, CD-ROM		PHOTOunSTUDIO 5.0 Edition; QuickTime; Adobe Reader Battery Charger, Battery Pack, Battery Case, AV Cable, USB Cable, Hand Strap, CD-ROM		